DMNS FAIR

Queens College, City University of New York
Division of Mathematics and Natural Sciences
Faculty Achievement In Research

MY NAME: Jeffrey Bird, Assistant Professor

MY DEPARTMENT: School of Earth and Environmental Sciences

SOMETHING INTERSTING ABOUT ME (OPTIONAL, MAY BE LEFT BLANK):

MY RESEARCH (IN SIMPLE WORDS THAT CAN BE UNDERSTOOD BY ANYONE ON THE Q64 BUS):

Professor Bird's biogeochemistry lab is focused on belowground carbon, nitrogen and sulfur cycling in terrestrial ecosystems. Soils are critical controllers on the flow of matter and energy in the environment and are considered especially important in the Earth's response to Global Change. Soils act as both a significant source of atmospheric greenhouse gases (i.e., carbon dioxide, methane and nitrous oxide) and as a sizable stable sink for plant C and N inputs.

Our research group investigates how soil microbial communities, plants, climate and mineralogy interact to control the turnover, loss or stabilization of soil C and N in temperate and tropical ecosystems.

The Bird lab uses stable isotopic tracers (^{13}C and ^{15}N) to follow C and N among plants, soil microbes, and mineral surfaces to better understand how soils support ecological productivity and environmental quality.

Lab website: http://qcpages.qc.cuny.edu/~jbird/index.htm

MY RESEARCH IN 140 CHARACTERS (OPTIONAL, MAY BE LEFT BLANK):

Ecosystem ecology/terrestrial biogeochemistry with a focus on the role of soils in enhancing environmental quality and sustainability.